

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method for classifying records, the method comprising:
 - receiving records containing several fields, the fields of which records contain values,
 - reading the values contained in at least two specified fields from each of the received records,
 - selecting field-specifically ordered classification structures corresponding to the specified fields, which field-specifically ordered classification structures comprise an own ordered classification structure for each of the specified fields in the received record,
 - for each record:
 - searching from the selected classification structures a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to a value read from one of said fields, and
 - forming an intersection set of the sets of suitable classes, and
 - selecting a class from the intersection set and assigning the selected class to the record, whereby said assigned class has been read from the field-specifically ordered classification structure.

2. (Previously presented) A method according to Claim 1, wherein:

forming an intersection set comprises forming a set on the basis of the values of the fields, in such a way that a set of classes is formed for each field; and

further wherein said intersection set comprises a field-specific set that incorporates service IDs, and a condition of a field used in a conditional statement of a given class of which is true, and

further wherein selecting a class comprises selecting the class that appears in all of the sets, i.e. whose conditional statement is entirely true.

3. (Previously presented) A method according to Claim 1, wherein selecting a class further comprises using the accuracy principle to select the class, to which the record is assigned, from the classes corresponding to a reference value or reference values, in which case that is selected, from of those corresponding to the reference value or reference values, which has the definition of which the greatest number of classification structure conditions are met.

4. (Currently Amended) A method according to any one of Claims 1 - 3, wherein selecting a class comprises selecting the class to which the record is assigned from the classes corresponding to a reference value or reference values, by applying an intersection or intersections and unions performed using logical operands.

5. (Previously presented) A method according to claim 1, wherein searching comprises using a search method that is faster than a sequential search, such as a binary search, a tree search, a hash search, and further wherein the least comparisons are used to find a reference value according to the value read from one of said fields.
6. (Previously presented) A method according to claim 1, wherein receiving records comprises receiving records that contain information regarding the properties of the telecommunications connections.
7. (Previously presented) A method according to claim 1, wherein the fields of the records are fields marked with a field ID.
8. (Previously presented) A method according to claim 1, wherein the fields contain values in various formats, such as numeric and symbolic values, and further wherein there are specific classification structures for the various formats, and/or indicators to the classification structures.
9. (Previously presented) A method according to claim 1, wherein said selected class comprises a service class of billable telecommunications services, or a call, and/or types of telecommunications connections.

10. (Previously presented) A method according to claim 1, wherein said selecting comprises separating the classes in the intersection set on the basis of conditions relating to the properties of telecommunications connections.

11. (Previously presented) A method according to claim 1, wherein at least one field identifier corresponds to a field depicting the duration in time of a billable telecommunications connection and/or a field depicting the volume and/or speed of the data transmitted over a billable telecommunications connection.

12. (Previously presented) A method according to claim 1, wherein the received record is a telecommunications network event description record, such as a CDR, ER, IPDR, or UDR.

13. (Previously presented) A method according to any of Claims 1 - 3, wherein the names of the fields are set to form the entries of the table and for each field at least one operand-specific table according to at least one of the following operands is created, greater than (>), greater than or equal to (>=), less than <, less than or equal to (<=), equal to (=), and not equal to (!=) tables, so that a tree-like field-specific classification structure is created for each specified field.

14. (Previously presented) A method according to claim 1, wherein the intersection set includes more than one class and, of these classes, the class with the greatest accuracy is

selected during said selecting step, wherein accuracy is defined on the basis of the number of fields used in a conditional statement of the class.

15. (Previously presented) A method according to claim 1, wherein the intersection set is an empty set and the class is selected in such a way that a review is made of the statement with next lowest accuracy.

16. (Previously presented) A method according to claim 1, wherein said method is performed in a mediator system of a telecommunications network.

17. (Previously presented) A classification system for records that is configured to receive records, the fields of which contain values, and to select the records to classes, the system comprising:

- a field-specific classification structure that classifies records according to at least one specified field of the received records,

- a logic connector that connects logical operands to the field-specific classification structure,

- a reference structure arrangement unit that arranges reference values used in the service-class definition suiting each operand relating to each defined field into a separately ordered structure,

- a class to structure connector that connects classes suiting each reference value to each ordered structure, and

a selection unit that selects, to a set class, the classification of a received record.

18. (Previously presented) A classification system according to Claim 17, further comprising a condition recorder that records the conditions of the classes in the classification structure.

19. (Previously presented) A classification system according to Claim 17 or 18, further comprising an operand-specific ordered data structure that contains at least one reference value and at least one service ID according to the reference value.

20. (Previously presented) A classification system according to Claim 17, the field-specific classification structure further comprising a selection structure based on operands and a class division corresponding to the selections according to the structure.

21. (Previously presented) A classification system according to claim 17, further comprising format-specific classification structures, or format-specific indicators to the classification structures.

22. (Previously presented) A classification system according to claim 17, wherein reference values in the field-specific classification structure are arranged as an ordered structure in order of magnitude.

23. (Previously presented) A classification system according to claim 17, the field-specific classification structure comprising a plurality of separate classification structures, wherein the separate structures are separated on the basis of the form of the symbol used in the classification structure field, such as character-form or numeric.

24. (Previously presented) A classification system according to claim 17, wherein the at least one specified field comprises a field depicting the data-transfer capacity of a billable telecommunications connection.

25. (Previously presented) A classification system according to claim 17, wherein the reference structure arrangement unit arranges the reference values in order of magnitude and/or accuracy.

26. (Previously presented) A classification system according to claim 17, further comprising:

a search engine that searches, for each record, from selected classification structures, a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to a value read from one of said fields, and

an intersection set forming unit that forms an intersection set of the sets of suitable classes.

27. (Previously presented) A classification system according to claim 17, wherein said system is part of a mediator system of a telecommunications network.

28. (Previously presented) A classification system according to claim 17, wherein the at least one specified field is a field marked using a field identifier.

29. (Previously presented) A classification system according to claim 17, wherein values with different formats, such as numeric and symbolic values, are set in the fields and there are specific classifications structures and/or indicators to classification structures for the different formats.

30. (Previously presented) A classification system according to claim 28, wherein at least one field identifier corresponds to a field depicting the duration in time of a billable telecommunications connection and/or a field depicting the volume and/or rate of data transmitted on a billable telecommunications connection.

31. (Previously presented) A computer-readable medium having embodied thereon a program that, when executed, causes a computer to execute a method for classifying records, the method comprising:

receiving records containing several fields, the fields of which records contain values,

reading the values contained in at least two specified fields from each of the received records,

selecting field-specifically ordered classification structures corresponding to the specified fields, which field-specifically ordered classification structures comprise an own ordered classification structure for each of the specified fields in the received record,

for each record:

searching from the selected classification structures a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to a value read from one of said fields, and

forming an intersection set of the sets of suitable classes, and

selecting a class from the intersection set and assigning the selected class to the record, whereby said assigned class has been read from the field-specifically ordered classification structure.